

## CLAIMS

What is claimed is:

1. A method for managing telecommunication trunk groups, a trunk group comprising media over which a plurality of trunks are established with hardware associated with the media, the method comprising:

receiving information regarding the configuration of telephony circuits comprising each trunk group to be managed;

receiving traffic information regarding the historical volume of traffic using the hardware associated with a trunk group;

displaying trunk groups; and

displaying information regarding at least one trunk group's configuration and traffic information associated with the at least one trunk group.

2. The method for managing telecommunication trunk groups of claim 1, further comprising:

receiving user input selecting a displayed trunk group;

determining the percentage utilization of each trunk group using the traffic information for the selected trunk group and the configuration information for the selected trunk group; and

displaying the percentage utilization of the selected trunk group.

3. The method for managing telecommunication trunk groups of claim 1, further comprising:

receiving user input selecting a displayed trunk group;

receiving user input setting a grade of service for the selected trunk group;  
and

calculating the number of trunks required for the selected trunk group to  
provide the set grade of service based upon the traffic information for the selected trunk  
group.

4. The method for managing telecommunication trunk groups of claim 2,  
further comprising:

receiving user input proposing configuration changes to the selected trunk  
group;

determining the percentage utilization of the selected trunk group that  
would result if the proposed configuration changes are made based upon the traffic  
information for the selected trunk group; and

displaying the percentage utilization of the selected trunk group that would  
result if the proposed configuration changes are made.

5. The method for managing telecommunication trunk groups of claim 4,  
wherein receiving user input proposing configuration changes to the selected trunk group  
comprises receiving user input proposing the removal of trunks dedicated to the selected trunk  
group.

6. The method for managing telecommunication trunk groups of claim 5,  
wherein receiving user input proposing configuration changes to the selected trunk group  
comprises receiving user input proposing the addition of trunks dedicated to the selected trunk  
group.

7. The method for managing telecommunication trunk groups of claim 1, further comprising:

receiving user input establishing trunk group selection criteria; and

displaying the trunk groups that meet the established trunk group selection criteria to a user.

8. The method for managing telecommunication trunk groups of claim 7, wherein receiving user input establishing trunk group selection criteria comprises receiving a minimum percentage utilization.

9. The method for managing telecommunication trunk groups of claim 7, wherein receiving user input establishing trunk group selection criteria comprises receiving a maximum percentage utilization.

10. The method for managing telecommunication trunk groups of claim 7, wherein receiving user input establishing trunk group selection criteria comprises receiving a range of percentage utilization.

11. The method for managing telecommunication trunk groups of claim 7, wherein receiving user input establishing trunk group selection comprises receiving information identifying the hardware associated with a trunk group.

12. The method for managing telecommunication trunk groups of claim 11, wherein receiving information identifying the hardware associated with a trunk group comprises receiving information identifying a telephony switch.

13. A method for managing telecommunication trunk groups, a trunk group comprising media over which a plurality of trunks are established with associated hardware, such as switches, the method comprising:

receiving information regarding the configuration of telephony circuits that use a trunk group;

receiving traffic information regarding the volume of traffic using the hardware associated with the trunks comprising a trunk group;

determining the percentage utilization of each trunk group using the traffic information and the configuration information for each trunk group;

placing trunk groups in user-groups;

receiving user input establishing trunk group selection criteria;

displaying the trunk groups that meet the established trunk group selection criteria to a user;

receiving user input selecting a displayed trunk group; and

displaying the percentage utilization of the selected trunk group.

14. The method for managing telecommunication trunk groups of claim 13, further comprising:

receiving input from a user setting a grade of service requirement for the selected trunk group;

calculating the number of trunks required for the selected trunk group to provide the set grade of service based upon the traffic information for the selected trunk group; and

displaying the number of trunks required for the selected trunk group to provide the set grade of service.

15. The method for managing telecommunication trunk groups of claim 13, further comprising:

receiving user input proposing configuration changes to the selected trunk group;

determining the percentage utilization that would result if the proposed configuration changes to the selected trunk group are made based upon the traffic information for the selected trunk group; and

displaying the percentage utilization that would result if the proposed configuration changes to the selected trunk group are made.

16. The method for managing telecommunication trunk groups of claim 15, wherein receiving user input proposing configuration changes to the selected trunk group comprises receiving user input proposing the removal of trunks from the selected trunk group.

17. The method for managing telecommunication trunk groups of claim 15, wherein receiving user input proposing configuration changes to the selected trunk group comprises receiving user input proposing the addition of trunks to the selected trunk group.

18. The method for managing telecommunication trunk groups of claim 15, wherein receiving user input proposing configuration changes to the selected trunk group comprises:

receiving user input proposing the removal of at least one trunk dedicated to the selected trunk group; and

receiving user input proposing the addition of at least one trunk dedicated to the selected trunk group.

19. At least one computer-readable media containing embodied thereon computer-readable code for causing a computer to perform a method for managing telecommunication trunk groups, the method comprising:

receiving information regarding the configuration of telephony circuits comprising each trunk group to be managed;

receiving traffic information regarding the historical volume of traffic using the hardware associated with a trunk group;

displaying trunk groups; and

displaying information regarding at least one trunk group's configuration and traffic information associated with the at least one trunk group.

20. The at least one computer-readable media of claim 19, the method further comprising:

receiving user input selecting a displayed trunk group;

determining the percentage utilization of each trunk group using the traffic information for the selected trunk group and the configuration information for the selected trunk group; and

displaying the percentage utilization of the selected trunk group.

21. The at least one computer-readable media of claim 19, the method further comprising:

receiving user input selecting a displayed trunk group;

receiving user input setting a grade of service for the selected trunk group;

and

calculating the number of trunks required for the selected trunk group to provide the set grade of service based upon the traffic information for the selected trunk group.

22. The at least one computer-readable media of claim 20, the method further comprising:

receiving user input proposing configuration changes to the selected trunk group;

determining the percentage utilization of the selected trunk group that would result if the proposed configuration changes are made based upon the traffic information for the selected trunk group; and

displaying the percentage utilization of the selected trunk group that would result if the proposed configuration changes are made.

23. The at least one computer-readable media of claim 22, the method further comprising:

receiving user input establishing trunk group selection criteria; and

displaying the trunk groups that meet the established trunk group selection criteria to a user.

24. The at least one computer-readable media of claim 20, wherein receiving user input establishing trunk group selection criteria comprises receiving a minimum percentage utilization.



25. The at least one computer-readable media of claim 24, wherein receiving user input establishing trunk group selection criteria comprises receiving a maximum percentage utilization.

26. The at least one computer-readable media of claim 20, wherein receiving user input establishing trunk group selection criteria comprises receiving a range of percentage utilization.

27. The at least one computer-readable media of claim 20, wherein receiving user input establishing trunk group selection criteria comprises receiving information identifying the hardware associated with a trunk group.

28. The at least one computer-readable media of claim 27, wherein receiving information identifying the hardware associated with a trunk group comprises receiving information identifying a telephony switch.

29. At least one computer-readable media containing embodied thereon computer-readable code for causing a computer to perform a method for managing telecommunication trunk groups, the method comprising:

receiving information regarding the configuration of telephony circuits that use a trunk group;

receiving traffic information regarding the volume of traffic using the hardware associated with the trunks comprising a trunk group;

determining the percentage utilization of each trunk group using the traffic information and the configuration information for each trunk group;

placing trunk groups in user-groups;

receiving user input establishing trunk group selection criteria;

displaying the trunk groups that meet the established trunk group selection criteria to a user;

receiving user input selecting a displayed trunk group; and

displaying the percentage utilization of the selected trunk group.

30. The at least one computer-readable media of claim 29, the method further comprising:

receiving input from a user setting a grade of service requirement for the selected trunk group;

calculating the number of trunks required for the selected trunk group to provide the set grade of service based upon the traffic information for the selected trunk group; and

displaying the number of trunks required for the selected trunk group to provide the set grade of service.

31. The at least one computer-readable media of claim 29, the method further comprising:

receiving user input proposing configuration changes to the selected trunk group;

determining the percentage utilization that would result if the proposed configuration changes to the selected trunk group are made based upon the traffic information for the selected trunk group; and

displaying the percentage utilization that would result if the proposed configuration changes to the selected trunk group are made

32. The at least one computer-readable media of claim 30, wherein receiving user input proposing configuration changes to the selected trunk group comprises receiving user input proposing the removal of trunks from the selected trunk group.

33. The at least one computer-readable media of claim 30, wherein receiving user input proposing configuration changes to the selected trunk group comprises receiving user input proposing the addition of trunks to the selected trunk group.

34. The at least one computer-readable media of claim 30, wherein receiving user input proposing configuration changes to the selected trunk group comprises:

receiving user input proposing the removal of trunk(s) dedicated to the selected trunk group; and

receiving user input proposing the addition of trunk(s) dedicated to the selected trunk group.